



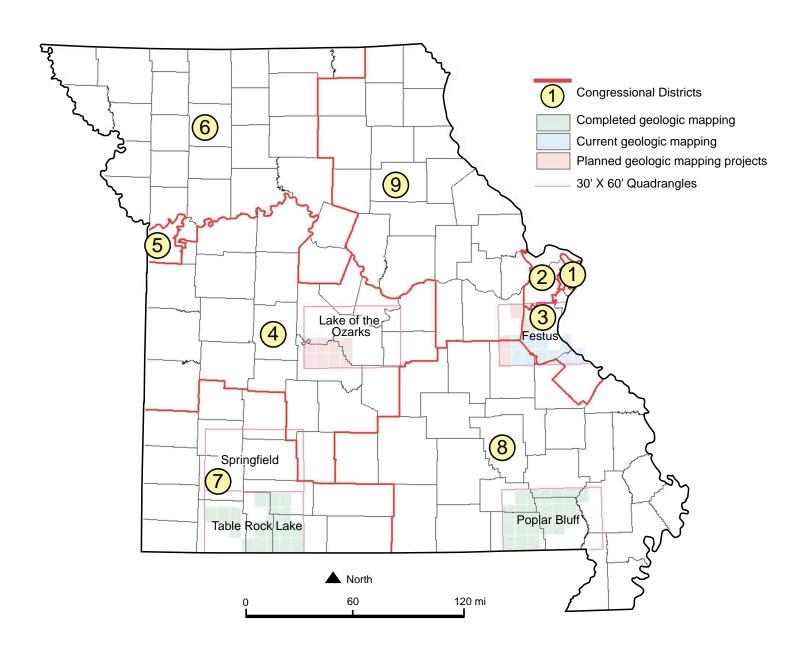
United States Geological Survey



## **National Cooperative Geologic Mapping Program**

STATEMAP Component: States compete for federal matching funds for geologic mapping

## **MISSOURI**



## **Contact information**

Missouri Division of Geology and Land Survey

Director: Mimi Garstang (573/368-2101)

STATEMAP Contact: Mark A. Middendorf (573/368-2147)

http://www.dnr.state.mo.us/dgls/homedgls.htm

U.S.G.S. Geologic Mapping Program Office Program Coordinators: Peter T. Lyttle (703/648-6943) Martha Garcia (703/648-6978)

http://ncgmp.usgs.gov/

## STATUS OF STATEMAP GEOLOGIC MAPPING PROGRAM IN MISSOURI

Year	Project Title	Federal Dollars	State Dollars	Total Project Dollars
93-94	Purdy and McDowell 7.5-min quadrangles	\$33,629	\$36,629	\$70,258
94-95	Lampe, Table Rock Dam, and Viola 7.5-min quadrangles	59,316	59,316	118,632
95-96	Garber and Reeds Spring 7.5-min quadrangles	35,000	35,402	70,402
96-97	Branson, Hollister, Mincy, Forsyth, and Shell Knob	86,775	86,801	173,576
	7.5-min quadrangles			
97-98	Day, Highlandville, Hurley, Jenkins, Selmore, and	101,675	101,921	203,596
	Spokane 7.5-min quadrangles			
98-99	Poplar Bluff 30' x 60' Quadrangle including Briar, Doniphan	100,000	100,001	200,001
	North, Doniphan South, Ellisnore, Flatwoods (N1/2), Grandin,			
	Grandin SW, Hogan Hollow, Hunter and Poyner 7.5-min quadrangles			
	Compilation of geologic mapping on Table Rock Lake,			
	30' x 60' Quadrangle			
99-00	Poplar Bluff 30' x 60' Quadrangle including Fairdealing,	102,545	139,224	241,769
	Flatwoods (S1/2), Harvell, Hendrickson, Oxly, Poplar Bluff,			
	Puxico, Rombauer, Stringtown, Wappapello, and Williamsville			
	7.5-min quadrangles			
00-01	Festus 30' x 60' Quadrangle including Bloomsdale, Danby, Desoto,	130,624	130,626	261,250
	Fletcher, Halifax, Old Mines, Richwoods, Selma, Tiff and Vineland			
	7.5-min quadrangles			
	Compilation of geologic mapping on Springfield 30' x 60' Quadrangle			
01-02	Festus 30' x 60' Quadrangle including Cedar Hill, Cyclone Hollow, Ebo,	177,608	164,608*	342,216
	and Gray Summit 7.5-min quadrangles			
	Lake Ozark 30' x 60' Quadrangle including Bagnell, Barnumton,			
	Bollinger Creek, Camdenton, Green Bay Terrace, Lake Ozark,			
	Sunrise Beach and Toronto 7.5-min quadrangles			
	Digitize existing geologic mapping on Festus 30' x 60' quadrangle			
	including Belew Creek, Festus, Herculaneum, House Springs,			
	Lonedell, Maxville, Moselle, Oakville, Pacific, St. Clair and Valmeyer			
	7.5-min quadrangles			
	TOTALS	\$827,172	\$854,528	\$1,681,700

<sup>\*</sup> Does not include any match for potential supplemental grants.

The Missouri Division of Geology and Land Survey (DGLS) is an active participant in the STATEMAP part of the National Cooperative Geologic Mapping Program (NCGMP), having participated since STATEMAP's inception in 1993. Missouri recognizes the importance of geologic mapping as a tool for land-use planners, emergency-management officials, developers, environmental agencies, mining companies, water-well drillers, and many others who have a need to understand the nature, composition, and distribution of earth materials.

Several areas of rural Missouri have undergone rapid growth in recent years. The unique beauty of the Ozarks has drawn thousands of tourists and new homeowners to the Branson, Springfield, and Lake of the Ozarks regions. The rapid development in these areas taxes natural resources and potentially impacts environmental quality. This has created a need for accurate geological information, and the State has responded by targeting geologic-mapping efforts in these areas. The mapping identifies geologically sensitive areas, such as karst areas that could be particularly susceptible to ground-water contamination. Geologic mapping also identifies areas of high-quality ground-water resources to guide the installation of water wells and identifies potential mineral and aggregate resources to support economic development.

Geologic mapping has also been focused in portions of southeast Missouri where geologic hazards are associated with the New Madrid Seismic Zone. Accurate geologic information is an essential tool in the preparation of earthquake-risk maps for use in the proper siting of new buildings, bridges, waste-disposal facilities, and dams. Mapping in both the Poplar Bluff and Festus area has been completed to optimize safe growth and minimize risks from landslides, liquifaction, and sinkhole collapse associated with earthquake hazards.

Since Missouri began its participation in the STATEMAP program, it has completed 38 bedrock and 20 surficial-material maps at a scale of 1:24,000. Ten more 7.5-min quadrangle maps are in progress, along with the compilation of geologic mapping in the Spring-field area. In July 2001 Missouri will begin mapping 12 additional quadrangles in areas of rapid development and digitizing 10 previously mapped quadrangles to make this information more accessible by the public and other agencies. During its eight-year involvement in the STATEMAP program, Missouri has received \$817,172 in Federal dollars that were matched with additional State funds. By July 2002, approximately 25% of the state will have reliable geologic-mapping information to assist decision makers with difficult resource choices and planning efforts.

March 2001